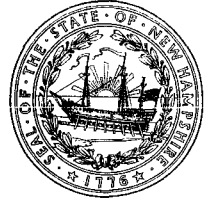




The State of New Hampshire
Department of Environmental Services



Michael P. Nolin
Commissioner

August 25, 2005
Letter of Deficiency
DSP#05-016

Ms. Adrienne Coit, Clerk
Sawyer Lake Village District
RFD #6, Box SL-47
Gilmanton, NH 03237

RE: Sawyer Lake Dam #091.01, Gilmanton

Dear Ms. Coit:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that play a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on April 25, 2005. During this visual inspection and/or file review, the following deficiencies were observed:

1. The left stoplog bay training wall, upstream of the bay, is leaning inwards towards the channel. Cracking, measured at 1.5 inches, has worsened at the interface of the stoplog bay framework and training wall. This is most likely caused by earth pressure behind the left training wall. Further evidence of wall movement is the bending of the steel anchors used to secure the stoplog bay locking bar;
2. The left training wall, upstream of the dam, is not level with the top of dam. During high water the low section in the wall will allow water to overtop the left abutment of the dam;
3. During a site visit on 4/25/05 with DES dam operator, Andy Stout, observation of the left training wall downstream of the bay was observed in a dewatered state just after stoplogs had been placed in the bay. A pinhole leak was observed along the wall just downstream of the bay. No water was observed along the downstream toe of the left training wall;
4. Seepage was observed at the downstream toe in areas approximately 25 feet and 50 feet to the left of the low level outlet. These areas have been noted during prior inspections and are routinely observed by NHDES dam tenders;
5. There was minor leakage through the closed gate as observed through the low- level outlet pipe. Corrosion was noted at the joints of the low level outlet pipe;
6. Wooden formwork remains on the upstream face of the concrete cutoff wall where repairs were made in the past. The commissioners have attempted to remove this formwork but have had difficulty; and
7. The Emergency Action Plan (EAP) needs to be updated and tested. Included in the update should be a more detailed assessment of the impact to downstream structures and the level of flooding expected.

Letter of Deficiency
Dam #091.01/DSP#05-016
August 25, 2005
pg. 2

DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

October 1, 2005:

1. Contact this office to make arrangements for the DES Dam Maintenance Engineer to assess the entire length of the left stoplog bay training wall;
2. Update and test the EAP. Included in the update should be a more detailed assessment of the impact to downstream structures and the level of flooding expected;

December 31, 2005:

3. Provide a design and cost estimate for the repair work to the left concrete training wall of the stoplog bay. Proceed with design of repairs;

December 31, 2006:

4. Complete repairs to the left concrete training wall of the stoplog bay; and

On a continuing basis:

5. Monitor the seepage areas and leakage through the gate.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. Please call or write to our office if the repairs are completed ahead of the aforementioned schedule so that DES may schedule a follow-up inspection. Unless notified otherwise, DES will conduct the follow-up inspection on or after the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the bottom of the previous page.

Sincerely,


Grace E. Levergood, P.E.
Dam Safety Engineer

Attachments DB13, Sketch Illustrating Deficiencies
cc: Bethann M. McCarthy, P.E., EAP Coordinator
Gretchen R. Hamel, Legal Unit Administrator ✓
Town of Gilmanton

Certified # 7000 1670 0000 0588 6462
GEL/was/h:/safety/wendy/lod/091-01lod.doc